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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/506,984	12/15/2004	Donald G Wind	287.00050101	2347

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EXAMINER

FEELY, MICHAEL J

ART UNIT	PAPER NUMBER
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1712

DATE MAILED: 05/18/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/506,984

Applicant(s)

WIND ET AL.

Examiner

Michael J. Feely

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**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 15 December 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4, 8-12 and 16-24 is/are rejected.
- 7) ☒ Claim(s) 5-7 and 13-15 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

**DETAILED ACTION**

***Claim Rejections - 35 USC § 102/103***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-4, 8-12, and 16-24 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Noda et al. (US Pat. No. 5,840,384).

*Regarding claims 1-4, 8-12, 16-22, and 24, Noda et al. disclose: (I) a method of making a coating composition, comprising the steps of:*

(a) blending an epoxy material (Abstract; column 3, lines 35-63), a reactive diluent

(Abstract; column 4, line 66 through column 5, line 5), and an acrylic resin (Abstract; column 2, lines 21-52);

(b) reacting the epoxy material and the acrylic resin to form an epoxy acrylate resin

(column 4, line 54 through column 5, line 5: *steps (a) through (d) take place simultaneously*);

(c) dispersing the reactive diluent and the epoxy acrylate resin into water (column 4, line

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- 54 through column 5, line 5: *steps (a) through (d) take place simultaneously*); and
- (d) polymerizing the reactive diluent (column 4, line 54 through column 5, line 5: *steps (a) through (d) take place simultaneously*);
- (2) wherein the epoxy material comprises diglycidyl ether of bisphenol-A (column 3, lines 56-63);
- (3) wherein the molecular weight of the epoxy material is 350 to 6,000 (column 3, lines 37-55);
- (4) wherein the molecular weight of the epoxy material is 1,500 to 4,000 (column 3, lines 37-55);
- (8) wherein the acrylic resin comprises a polymeric backbone having at least one pendant or terminal carboxylic acid moiety (column 2, lines 21-52); (9) wherein the acrylic resin is formed using a monomer selected from the group consisting of acrylic acid, methacrylic acid, fumaric acid, crotonic acid, maleic acid, and itaconic acid (column 2, lines 21-52); (10) wherein the acrylic resin is formed using a monomer selected from the group consisting of *see claim for list* (column 2, lines 21-52); (11) wherein the acrylic resin is formed using acrylic acid, styrene, and ethyl acrylate (column 2, lines 21-52);
- (12) wherein the composition further comprises an initiator (Abstract; column 3, line 64 through column 4, line 8);
- (20) a method of coating a substrate comprising the steps of:
- (a) applying a coating prepared according to the method of claim 1 on a substrate (column 4, line 54 through column 5, line 55; and
- (b) hardening the coating (column 4, line 54 through column 5, line 55); (21)

wherein the substrate is metal (column 5, lines 16-25); (22) wherein the substrate is a portion of a container (column 5, lines 16-25); and (24) a substrate coated with a coating composition prepared according to the method of claim 1 (column 5, lines 16-25).

Noda do not explicitly disclose: (1) wherein the composition formed has a volatile organic compound content of no greater than 0.4 kilograms per liter of solids; (16) no greater than 0.3 kilograms per liter of solids; (17) no greater than 0.2 kilograms per liter of solids; (18) no greater than 0.1 kilograms per liter of solids; and (19) is substantially free of formaldehyde.

Regarding the presence of formaldehyde, the composition does not appear to feature formaldehyde. The reference is silent regarding the presence of any formaldehyde content.

Regarding the VOC content, the composition does not appear to feature volatile solvents. Furthermore, it should be noted that the composition of Noda et al. “minimizes a generation of fume in an oven during curing” (*see Abstract; column 4, line 66 through column 5, line 5*).

Therefore, if not inherently taught by the reference, then the claimed VOC levels would have been an obvious feature in order to reduce the generation of fume in an oven during curing.

*Regarding claims 23*, Noda et al. disclose: (23) a coating composition comprising: an aqueous dispersion of an epoxy acrylate resin and a polymerized diluent (*Abstract; column 4, line 54 through column 5, line 5*).

Noda do not explicitly disclose: (23) wherein the composition formed has a volatile organic compound content of no greater than 0.4 kilograms per liter of solids. However, the composition does not appear to feature volatile solvents. Furthermore, it should be noted that the

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composition of Noda et al. “minimizes a generation of fume in an oven during curing” (*see Abstract; column 4, line 66 through column 5, line 5*).

Therefore, if not inherently taught by the reference, then the claimed VOC levels would have been an obvious feature in order to reduce the generation of fume in an oven during curing.

***Allowable Subject Matter***

4. Claims 5-7 and 13-15 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

5. The following is a statement of reasons for the indication of allowable subject matter:

The prior art does not teach or fairly suggest:

(a) the reactive diluents set forth in claims 5-7 (*see column 4, line 66 through column 6, line 5*); and

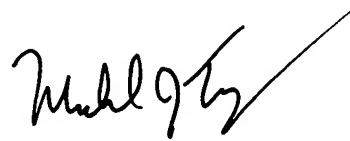
(b) the initiators set forth in claims 13-15 (*see: Abstract; column 3, line 64 through column 4, line 8*).

*Communication*

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael J. Feely whose telephone number is 571-272-1086. The examiner can normally be reached on M-F 8:30 to 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Randy Gulakowski can be reached on 571-272-1302. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Michael J. Feely  
Primary Examiner  
Art Unit 1712

May 16, 2005